STD174.DGN

90° SKEW

2:1 SLOPE				
H	W	h	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	5.00	1.75	3.3	630
4.5	5.75	2.00	4.1	694
5	6.50	2.25	5.3	781
5.5	7.25	2.50	6.3	914
6	8.00	2.75	7.4	1,014
6.5	8.50	3.00	8.4	1,069
7	9.25	3.25	10.1	1,367
7.5	10.00	3.50	11.5	1,486
8	10.75	3.75	13.0	1,607
8.5	11.50	4.00	14.6	1,749
9	12.25	4.25	16.9	2,576
9.5	12.75	4.50	18.4	2,639
10	13.50	4.75	20.4	2,875
10.5	14.25	5.00	23.2	3,091
11	15.00	5.25	26.3	3,494
11.5	15.75	5.50	30.3	4,328
12	16.50	5.75	32.9	4,544
12.5	17.00	6.00	35.1	4,662
13	17.75	6.25	39.4	5,610
13.5	18.50	6.50	42.4	6,003
14	19.25	6.75	45.5	6,260
14.5	20.00	7.00	49.9	6,741
15	20.75	7.25	56.4	7,352
15.5	21.25	7.50	59.4	8,039
16	22.00	7.75	63.2	8,506
16.5	22.75	8.00	67.2	9,812
17	23.50	8.25	73.7	10,799
17.5	24.25	8.50	78.1	10,884
18	24.75	8.75	81.7	11,209
18.5	25.50	9.00	88.3	11,733
19	26.25	9.25	97.7	12,981
19.5	27.00	9.50	102.8	14,737
20	27.75	9.75	108.1	15,265
20.5	28.50	10.00	113.5	15,719
21	29.00	10.25	126.0	17,262

3:1 SLOPE				
H	W	h	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	6.25	2.25	4.3	675
4.5	7.25	2.50	5.4	744
5	8.00	3.00	6.9	849
5.5	9.00	3.25	8.3	1,014
6	9.75	3.50	9.5	1,116
6.5	10.50	3.75	10.8	1,180
7	11.50	4.00	13.1	1,520
7.5	12.25	4.50	14.9	1,624
8	13.25	4.75	16.9	1,754
8.5	14.00	5.00	19.5	1,974
9	14.75	5.25	22.2	2,962
9.5	15.75	5.50	24.7	3,082
10	16.50	6.00	27.3	3,342
10.5	17.50	6.25	30.1	3,504
11	18.25	6.50	33.6	3,928
11.5	19.00	6.75	37.5	4,786
12	20.00	7.00	41.9	5,216
12.5	20.75	7.50	45.4	5,394
13	21.75	7.75	52.0	6,412
13.5	22.50	8.00	55.4	6,870
14	23.25	8.25	59.0	7,136
14.5	24.25	8.50	63.3	7,589
15	25.00	9.00	73.3	8,368
15.5	25.75	9.25	77.5	9,299
16	26.75	9.50	82.6	9,820
16.5	27.50	9.75	87.1	11,451
17	28.50	10.00	95.7	12,593
17.5	29.25	10.50	101.2	12,502
18	30.00	10.75	106.4	12,936
18.5	31.00	11.00	118.0	13,630
19	31.75	11.25	129.5	14,977
19.5	32.75	11.50	136.5	17,020
20	33.50	12.00	143.3	17,579
20.5	34.25	12.25	149.6	18,066
21	35.25	12.50	167.3	19,857

4:1 SLOPE				
H	W	h	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	7.25	2.50	5.1	716
4.5	8.25	3.00	6.4	786
5	9.00	3.25	7.9	896
5.5	10.00	3.50	9.4	1,067
6	11.00	4.00	11.1	1,176
6.5	12.00	4.25	12.8	1,265
7	12.75	4.50	14.9	1,611
7.5	13.75	5.00	17.9	1,779
8	14.75	5.25	20.1	1,915
8.5	15.75	5.50	22.4	2,119
9	16.50	6.00	25.7	3,136
9.5	17.50	6.25	28.4	3,257
10	18.50	6.50	31.3	3,584
10.5	19.50	7.00	35.5	3,869
11	20.50	7.25	39.8	4,321
11.5	21.25	7.50	44.2	5,262
12	22.25	8.00	48.3	5,554
12.5	23.25	8.25	49.5	5,602
13	24.25	8.50	59.3	6,791
13.5	25.00	9.00	65.2	7,533
14	26.00	9.25	69.7	7,870
14.5	27.00	9.50	74.5	8,299
15	28.00	10.00	86.4	9,193

6:1 SLOPE				
H	W	h	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	8.25	3.00	6.1	757
4.5	9.25	3.25	7.3	828
5	10.50	3.75	9.6	965
5.5	11.50	4.00	11.1	1,146
6	12.50	4.50	13.0	1,256
6.5	13.50	4.75	14.8	1,346
7	14.50	5.25	18.0	1,753

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

NOTE: QUANTITIES ON THIS SHEET ARE ESTIMATED TOTALS FOR ALL FOUR WINGWALLS.

NOTE: ADDITIONAL CONCRETE AND REINFORCEMENT QUANTITIES FOR BOX CULVERT CUT-OFF WALL SHALL BE ADJUSTED BASED ON AS-BUILT DIMENSIONS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WINGWALL DIMENSIONS AND QUANTITIES

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-11

DESIGNED BY CMH / MAH DATE 12-09
DRAWN BY DIANE BUSH DATE 04-10
SUPERVISED BY RLH / JWP / MAH DATE 12-09
CHECKED BY DATE

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Jul 21 2010
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